

# **BENTLEY 2012-TD** **(2011 - 2017 Continental / GT)** **(VIDEO Interface)**



MODEL	BT-2012-180605
DATE	2018.09.12

# Main Spec.

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## 1. Input Spec. (MULTI VIDEO INTERFACE)

- 2 x A/V Input (External video source).
- 1 x CVBS(REAR CAMERA) Input. (Rear camera source)
- 1 x CVBS(Front CAMERA) Input. (Front camera source)
- 1 x Analog RGB Input (Navigation System source)
- 1 x Digital RGB Input (Navigation System source)
- 1 x LVDS Input. (Car Command System)

## 2. Output Spec.

- 2 x CVBS Output (Video out for Installing Headrest Monitor)
- 1 x Audio L/R Output.
- 1 x Vertual Analog Touch (Navigation System source)
- 1 x Uart Digital Touch (Navigation System source)
- 1 x LCD Output (LCD Operation)

## 3. Power Spec.

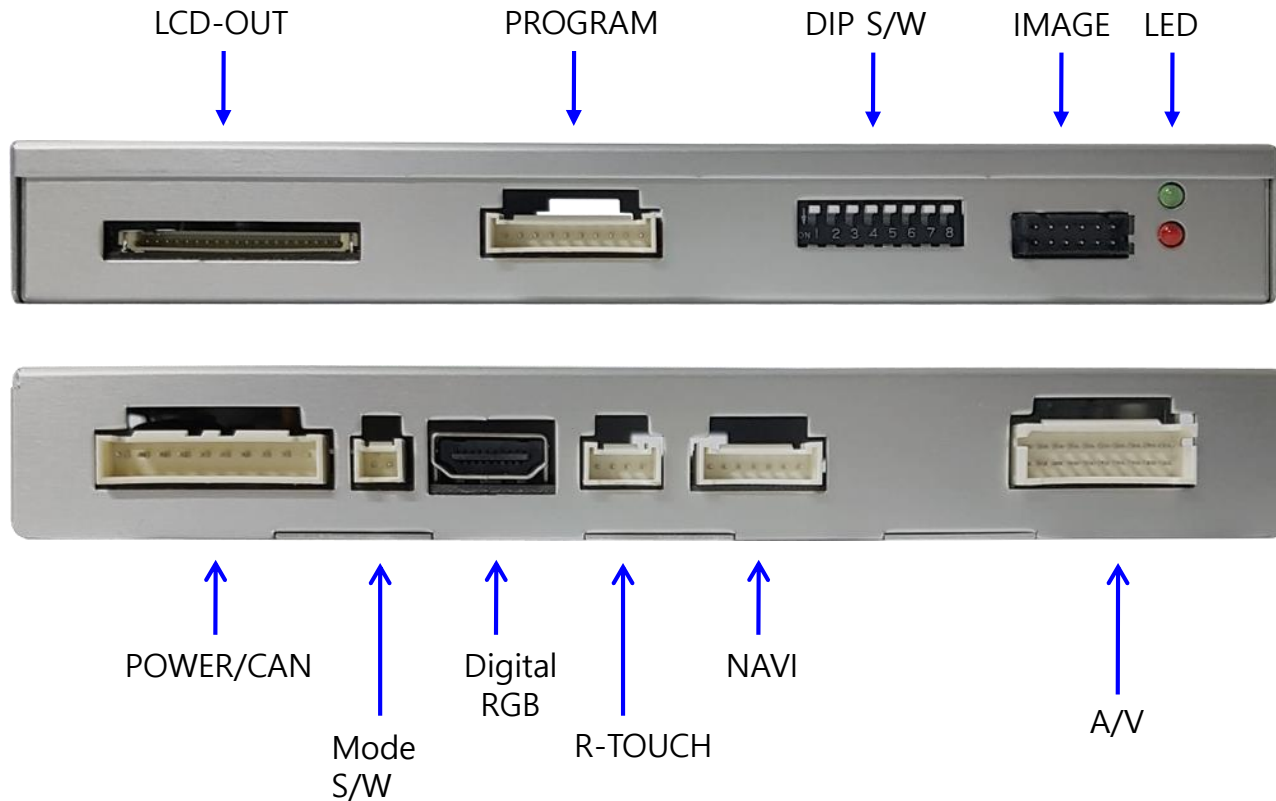
- Input Power : 8VDC ~ 24VDC
- Consumption Power : 12Watt, Max

## 4. Switch Input mode

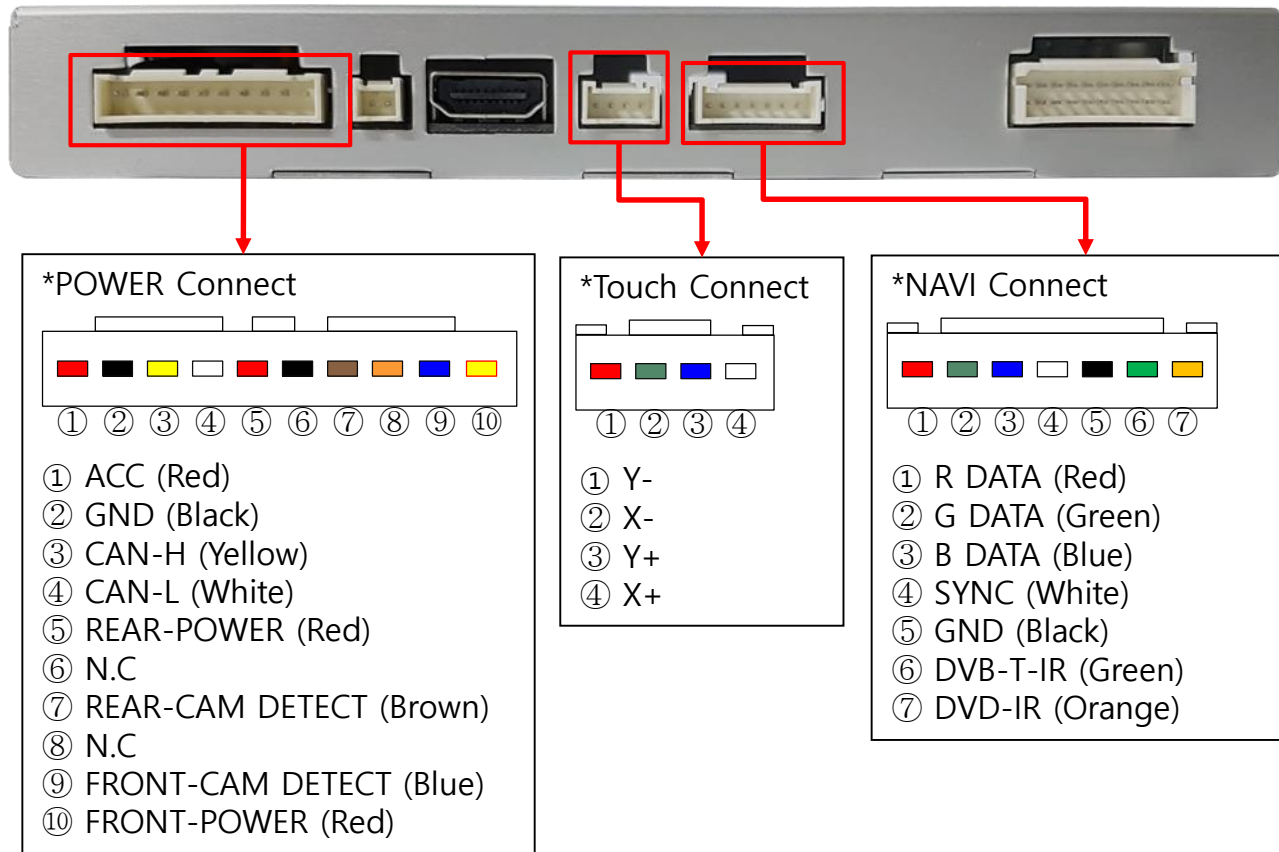
- Possible to select CAR model while switching mode by DIP S/W

# External Appearance

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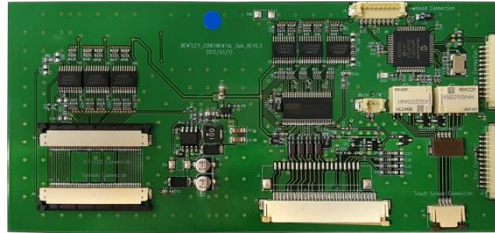
# Connector Pin Assignment



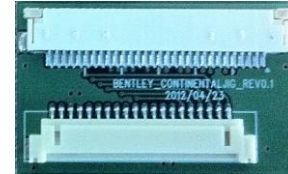
# Product Composition



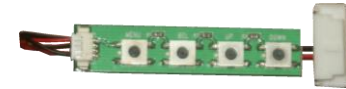
Interface 1 EA



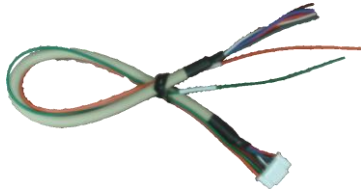
SUB Board 1 EA



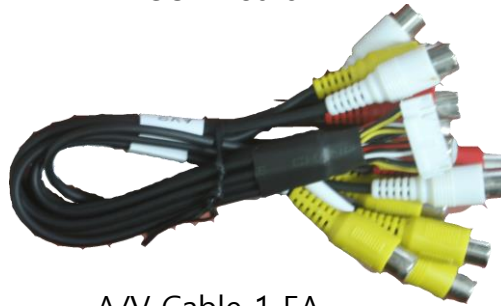
JIG Board 1 EA



OSD Board 1 EA



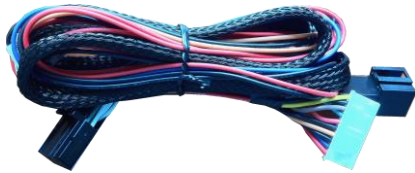
RGB Navi Cable 1 EA



A/V Cable 1 EA



Touch FPC Cable(100mm) 2 EA



Power Cable 1 EA



LVDS Cable(800mm) 1 EA



(100mm)



(130mm)



(150mm)

LVDS FPC Cable 3 EA



Mode S/W 1 EA



Mode Cable 1 EA

# DIP S/W Setting

\* ON : DOWN , OFF : UP

PIN	FUNCTION	DIP S/W Selection
1	NAVI INPUT MUTE	ON : Skipping NAVI Mode OFF : NAVI Display
2	AV1 MUTE	ON : Skipping AV1 OFF : AV1 Display
3	AV2 MUTE	ON : Skipping AV2 OFF : AV2 Display
4	N.C	
5	N.C	
6	CAR type SEL	Right Picture
7		
8		

\* DIP S/W Example



BENTLEY 2011~2017

# Mode Change

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## OEM BUTTON CONTROL



Return OEM display



mode change (Long press 1 second)

# Touch Control

## Touch control - Calibration

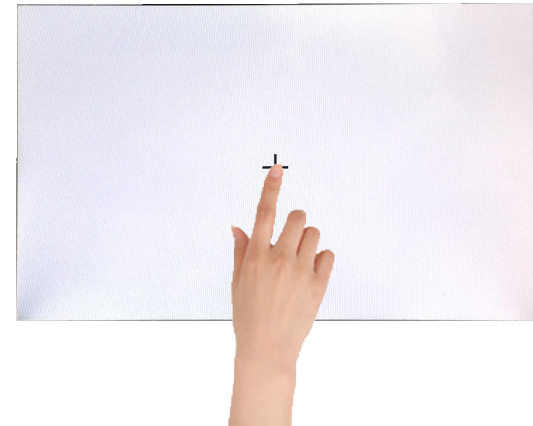


Press and hold for more than 11 seconds on NAVI, DVB-T, DVD screen.  
(Note that it only works the first time after switching screens)

OR

MENU	Calibration	NAVI
OSD	Factory Reset	Execute Cancel
IR-Ctrl	Calibration	Execute Cancel
Utility	Version	FDSHOOKRX-180112

OSD menu -> Utility -> Calibration



+ Touch according to the shape coordinates.



# Touch Control

## DVB-T/DVD Control

DVB-T

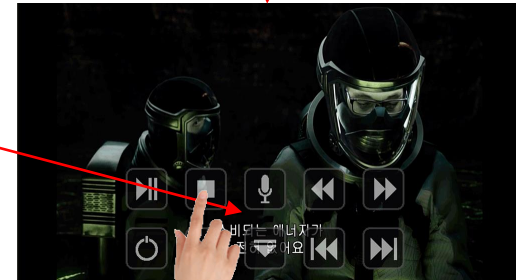


Press Touch(Anywhere)



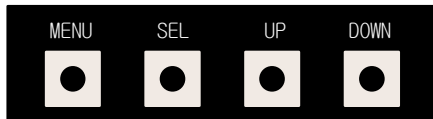
Press Icon

DVD



# OSD(On Screen Display) Control

## OSD Control Board



MENU	When there is no OSD screen, pressing OSD ON When OSD screen is displayed, press OSD EXITT
SEL	Item Selection, Value Selection
UP	Item up Increase selected value
DOWN	Item down Decrease selected value

MENU	Option	Mode State
Config	RearCam-Type	ExtDevice
Option	RearCam-Power	Auto
Image	RearCam-Det	GEAR
Screen	AV Mode	Off
Parking	FrontCam-Type	ExtDevice

First Menu      Second Menu      Third Menu

# OSD(On Screen Display) Control

## OSD - Config Menu

First Menu	Second Menu	Third Menu	Description
Config	NAVI-RGB	DIGITAL-INAVI :	Setting the Connected NAVI Model
	DVB-T(DMB)	ELT_DVBT20 :	Setting the Connected DVB-T Model
	DVD	ELT_980XU Slim :	Setting the Connected DVD Model
	Reset	Execute	Reset to default value of Config menu

## global

MENU	NAVI-RGB	NAVI
Config	NAVI-RGB	GI5000_WVGA
Option	Reset	Execute Cancel
Image		
Screen		
Parking		

# OSD(On Screen Display) Control

## OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	RearCam-Type	OEM	Original Camera
		ExtDevice	Equipped with external camera
	RearCam-Power	ON	+ 12V continuous supply
		AUTO	+ 12V supply only in Rear camera mode
		OFF	+ 12V off
	RearCam-Det	GEAR	Detected by CAN
		WIRE	Detected by Rear-Det Wire
	FrontCam-Type	OEM	Original Camera
		ExtDevice	Equipped with external camera
	FrontCam-Power	ON	+ 12V continuous supply
		AUTO	+ 12V supply only in Front camera mode
		OFF	+ 12V off
	FrontCam-Det	CAN	Detected by CAN
		WIRE	Detected by Front-Det Wire

MENU	RearCam-Type	NAVI
Config	RearCam-Type	OEM
Option	RearCam-Power	Auto
Image	RearCam-Det	GEAR
Screen	AV Mode	Off
Parking	FrontCam-Type	ExtDevice

# OSD(On Screen Display) Control

## OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	FrontCam-RcvOpt	ON	After RearCam shows FrontCam and returns to previous state
		OFF	Disable feature
	AV OUT	AV1	In the OEM, NAVI, AV1, FRONT, and REAR modes, the output of AV OUT is set to AV1.
		AV2	In the OEM, NAVI, AV2, FRONT, and REAR modes, the output of AV OUT is set to AV2.
		USER	In the OEM, NAVI, FRONT, and REAR modes, output the output of AV OUT to the final screen.
	UI DVB-T (DMB)	ON	DVB-T device control UI output function
		OFF	Disable feature

MENU	FrontCam-Power	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="checkbox"/> Os
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel

# OSD(On Screen Display) Control

## OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	FrontCam-RcvOpt	ON	After RearCam shows FrontCam and returns to previous state
		OFF	Disable feature
	AV OUT	AV1	In the OEM, NAVI, AV1, FRONT, and REAR modes, the output of AV OUT is set to AV1.
		AV2	In the OEM, NAVI, AV2, FRONT, and REAR modes, the output of AV OUT is set to AV2.
		USER	In the OEM, NAVI, FRONT, and REAR modes, output the output of AV OUT to the final screen.
	UI DVB-T (DMB)	ON	DVB-T device control UI output function
		OFF	Disable feature

MENU	FrontCam-Power	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="checkbox"/> Os
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel

# OSD(On Screen Display) Control

## OSD - Option Menu

First Menu	Second Menu	Third Menu	Description
Option	UI DVD	ON	DVD device control UI output function
		OFF	Disable feature
	NAVI COM	HMS FINE :	Set up manufacturer of woodworking device for UART Touch use
		OFF	Disable feature
	Reset	Execute	Option Menu all Reset

MENU	FrontCam-Power	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="checkbox"/> Os
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel

# OSD(On Screen Display) Control

## OSD Option -> FrontCam-RcvOpt

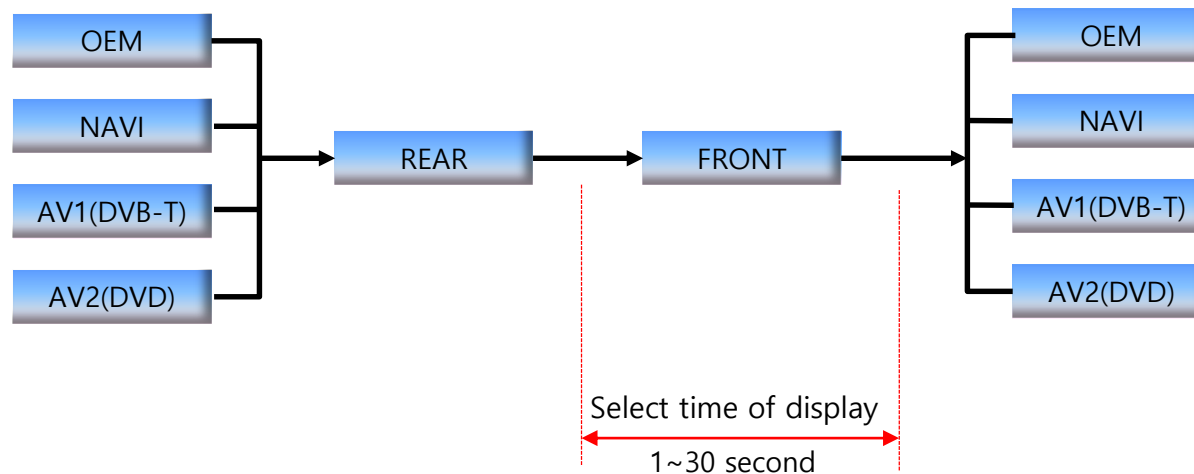
### Front Camera Auto Mode

0 second = FrontCam-RcvOpt menu OFF

1~30 second = FrontCam-RcvOpt menu ON & time control

MENU	FrontCam-RcvOpt	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="text"/> 0s
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel

MENU	FrontCam-RcvOpt	NAVI
Config	FrontCam-Power	Auto
Option	FrontCam-Det	ExtWire
Image	FrontCam-RcvOpt	<input type="text"/> 30s
Screen	Steering Wheel	Voice
Parking	Reset	Execute Cancel





# OSD(On Screen Display) Control

## OSD Image

NAVI-RGB menu

DVD,DVB-T(DMB),NAVI-AV,REAR,FRONT menu

First Menu	Second Menu	Third Menu	Action
Image	Brightness		Adjust the value of brightness
	Contrast		Adjust the value of contrast
	Color-RED		Adjust the value of RED
	Color-GREEN		Adjust the value of GREEN
	Color-BLUE		Adjust the value of BLUE
	Reset	Execute	Image Menu all Reset

First Menu	Second Menu	Third Menu	Action
Image	Brightness		Adjust the value of brightness
	Contrast		Adjust the value of contrast
	Saturation		Adjust the value of Saturation
	Hue		Adjust the value of Hue
	Sharpness		Adjust the value of Sharpness
	Reset	Execute	Image Menu all Reset



<< Brightness >>



<< Saturation >>



<< Contrast >>

# OSD(On Screen Display) Control

## OSD – Screen Menu

First Menu	Second Menu	Third Menu	Description
Screen	Horizontal		Output screen horizontal movement
	Vertical		Output screen vertical movement
	Scale X Up		Reduce / increase output screen width
	Scale X Down		
	Scale Y Up		Reduce / Increase Output Screen Height
	Scale Y Down		
	Reset		Screen menu all reset

MENU	Horizontal	NAVI
Config	Horizontal	50
Option	Vertical	50
Image	Scale X Up	50
Screen	Scale X Down	50
Parking	Scale Y Up	50

# OSD(On Screen Display) Control

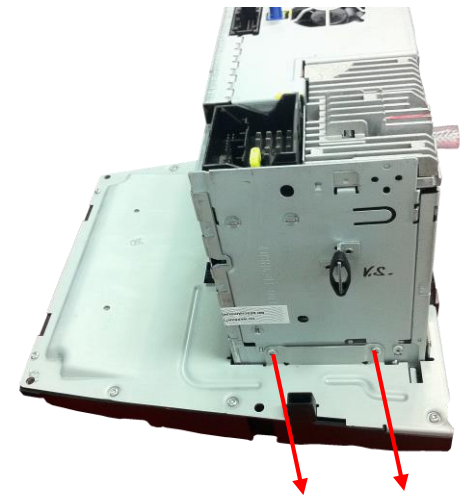
## OSD – Parking Menu

First Menu	Second Menu	Third Menu	Description
Parking	Warnings Lang		Set warning text language
	Reset		Parking menu all reset

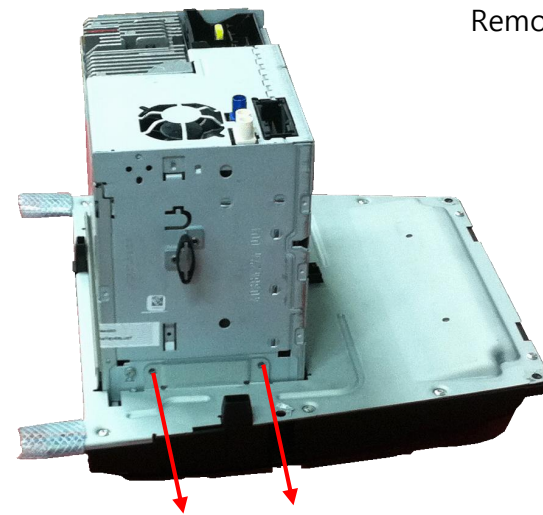
MENU	OPS Display	REAR
Config	OPS Display	Off
Option	Line Display	Off
Image	Warnings Lang	English
Screen	Horizontal	<input type="text" value="50"/>
Parking	Vertical	<input type="text" value="60"/>

# Install Manual

## 1. Monitor dismantle



Remove bolts

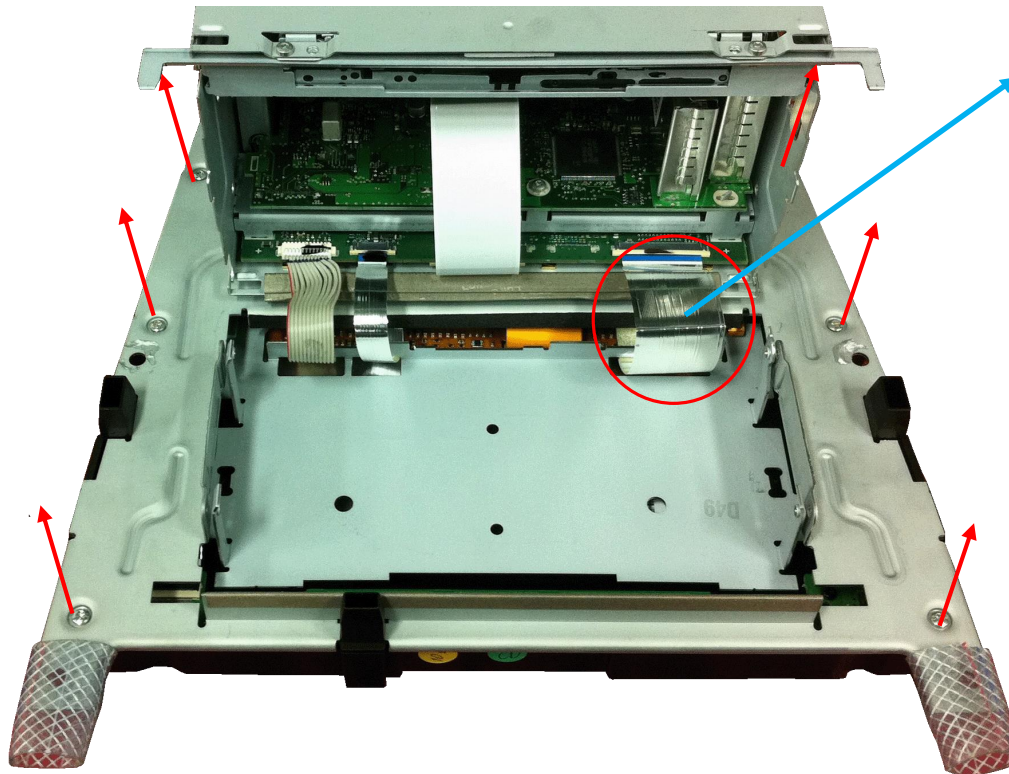


Remove bolts

# Install Manual

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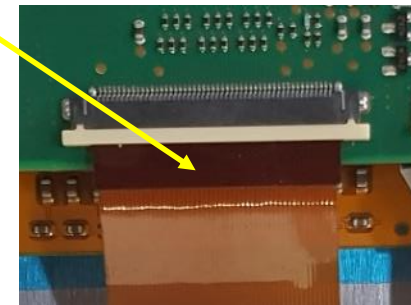
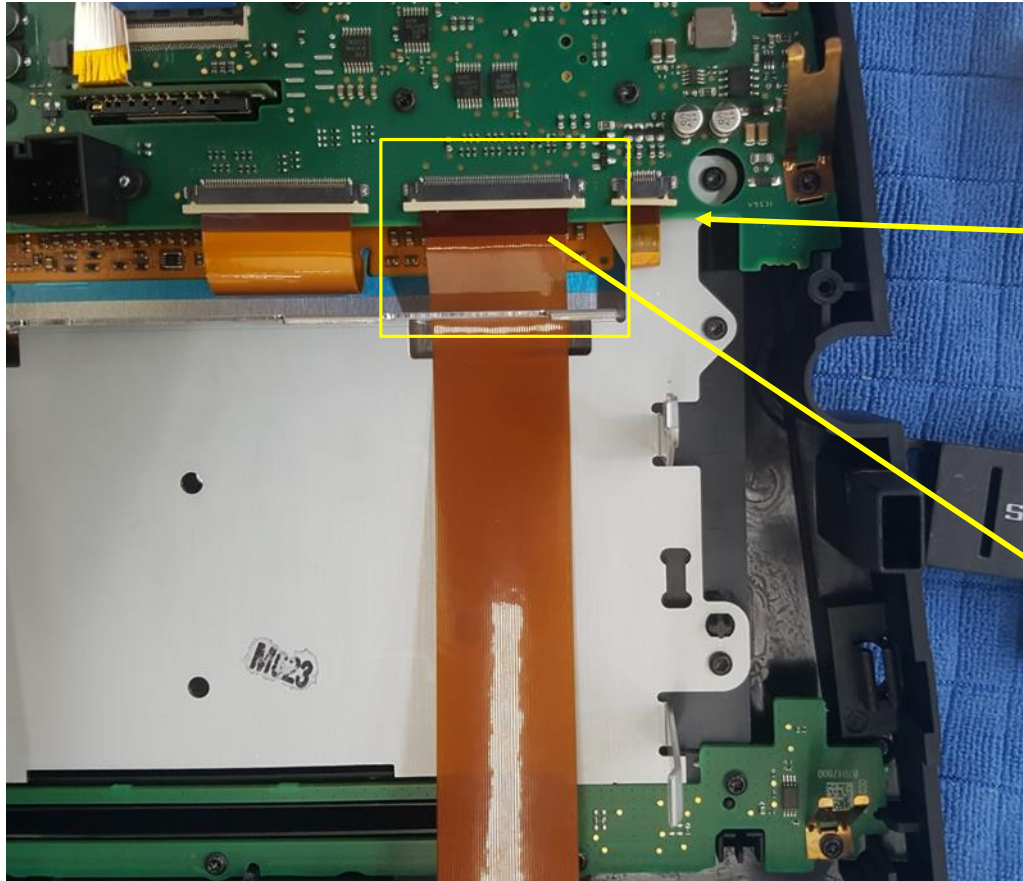
## 2. Monitor dismantle



Silver Color FPC Cable  
Remove it completely.  
Not used.

# Install Manual

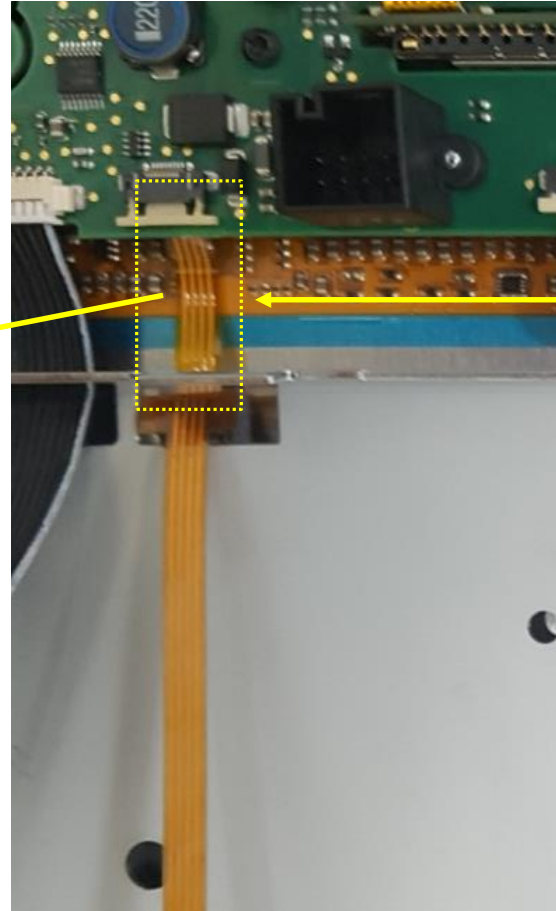
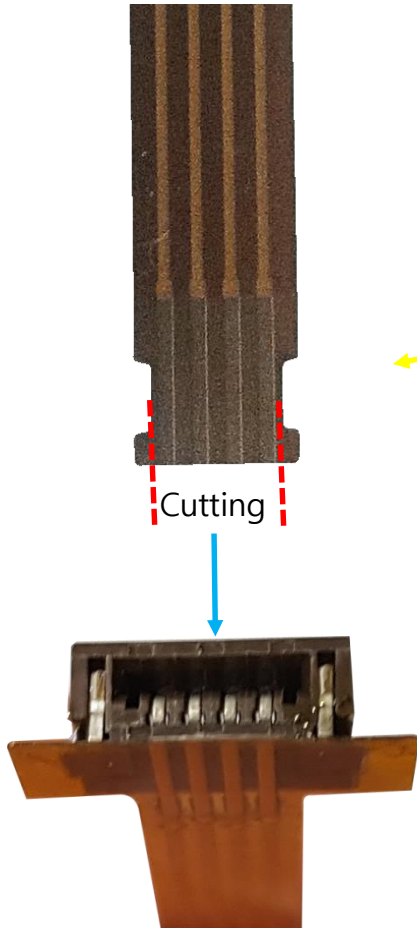
## 3. LVDS FPC cable connection



Work to make black visible.

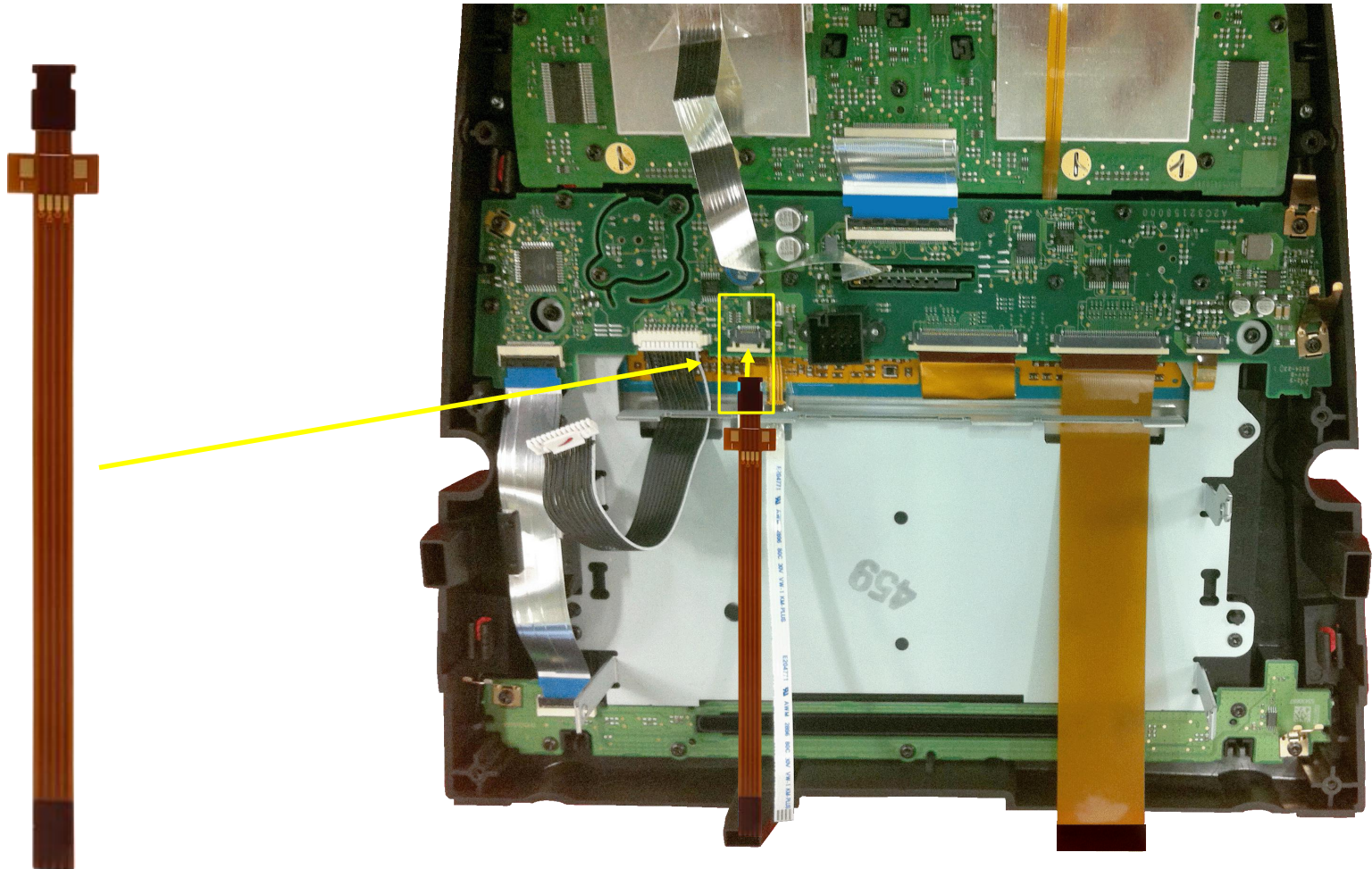
# Install Manual

## 4. Touch FPC cable connection



# Install Manual

## 5. Touch FPC cable connection

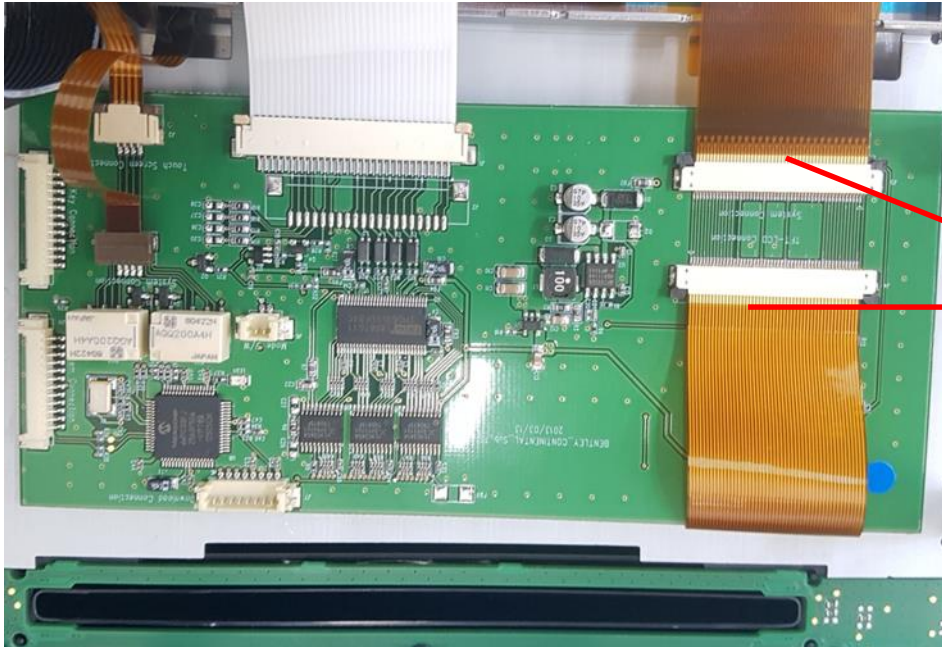




# Install Manual

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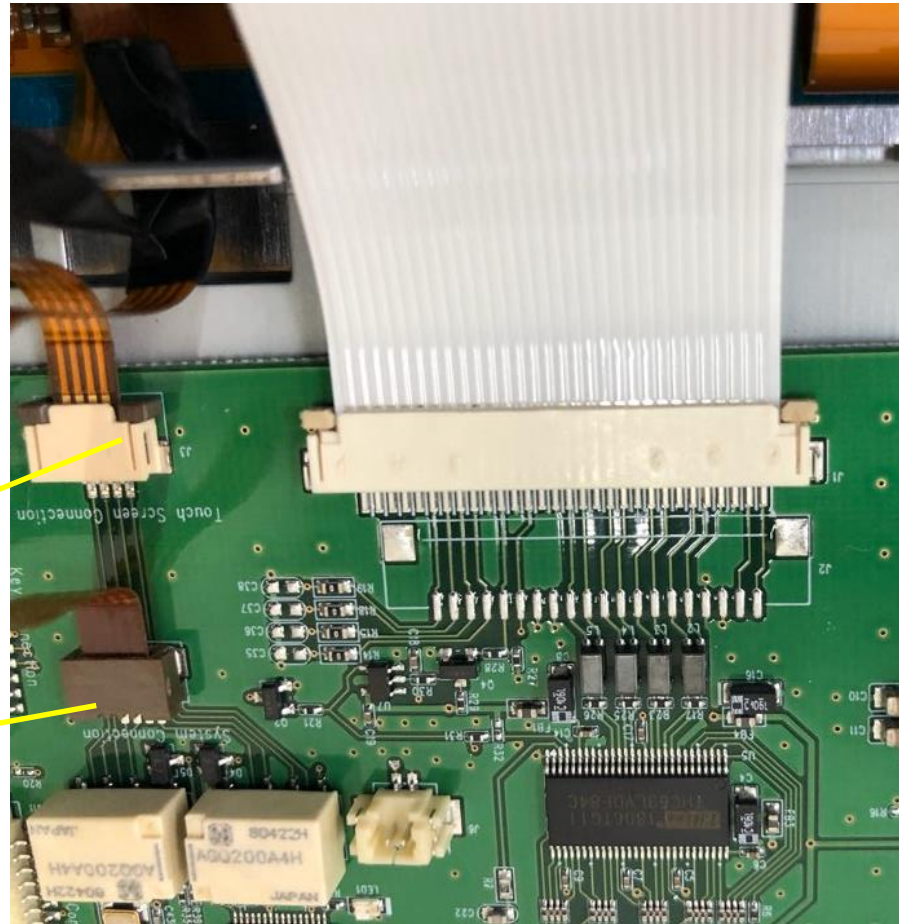
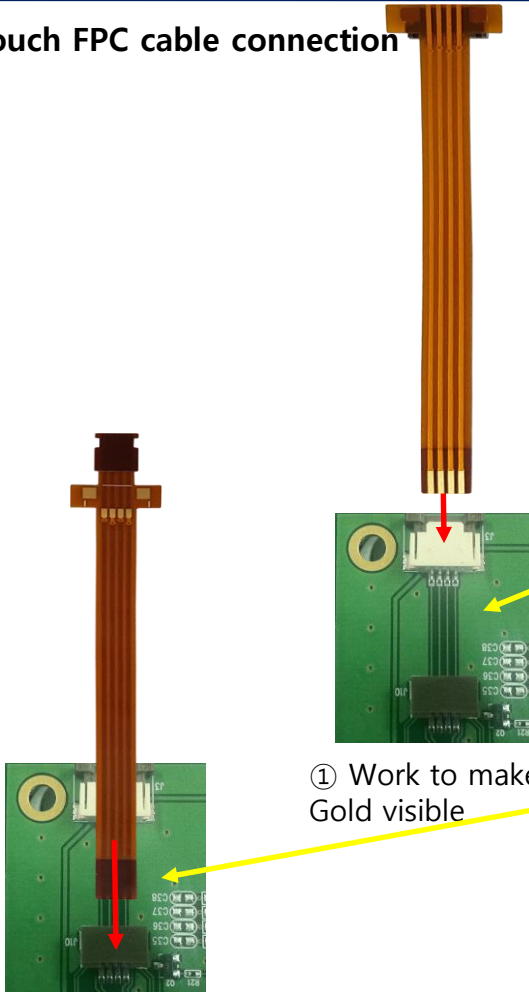
## 6. LVDS FPC cable connection



Work to make Gold visible

# Install Manual

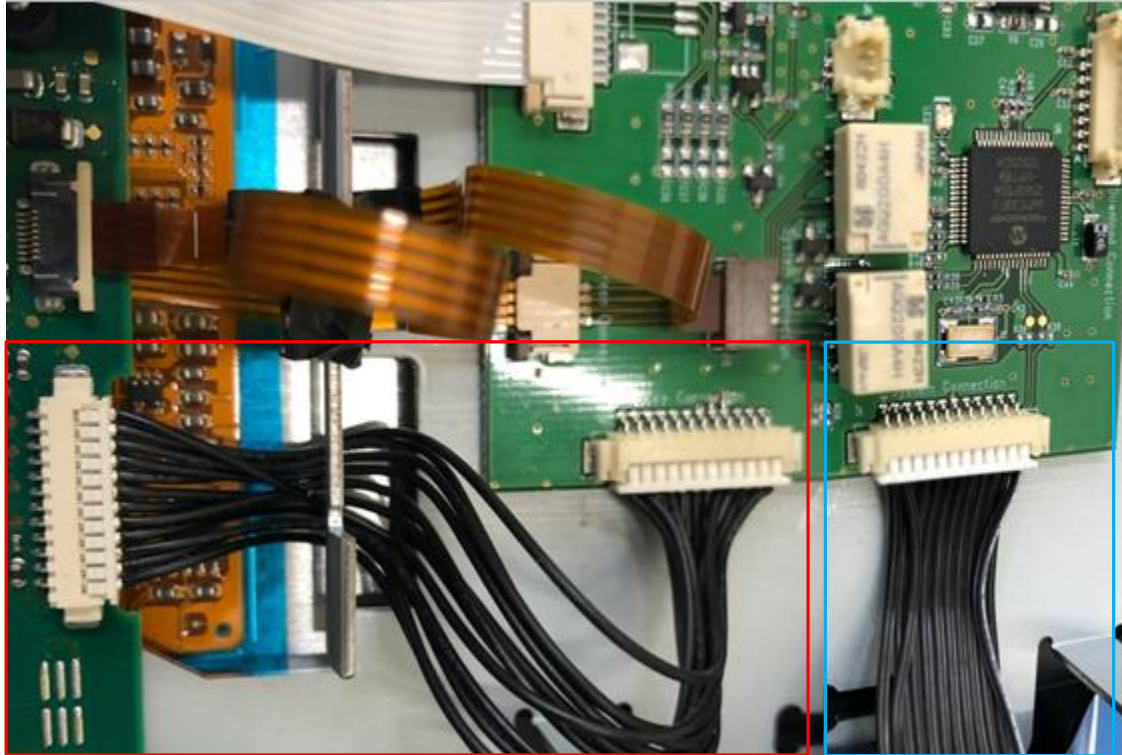
## 7. Touch FPC cable connection



# Install Manual

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## 8. Mode cable connection



Connect the provided mode cable.

Connect the OEM cable.

# Install Manual

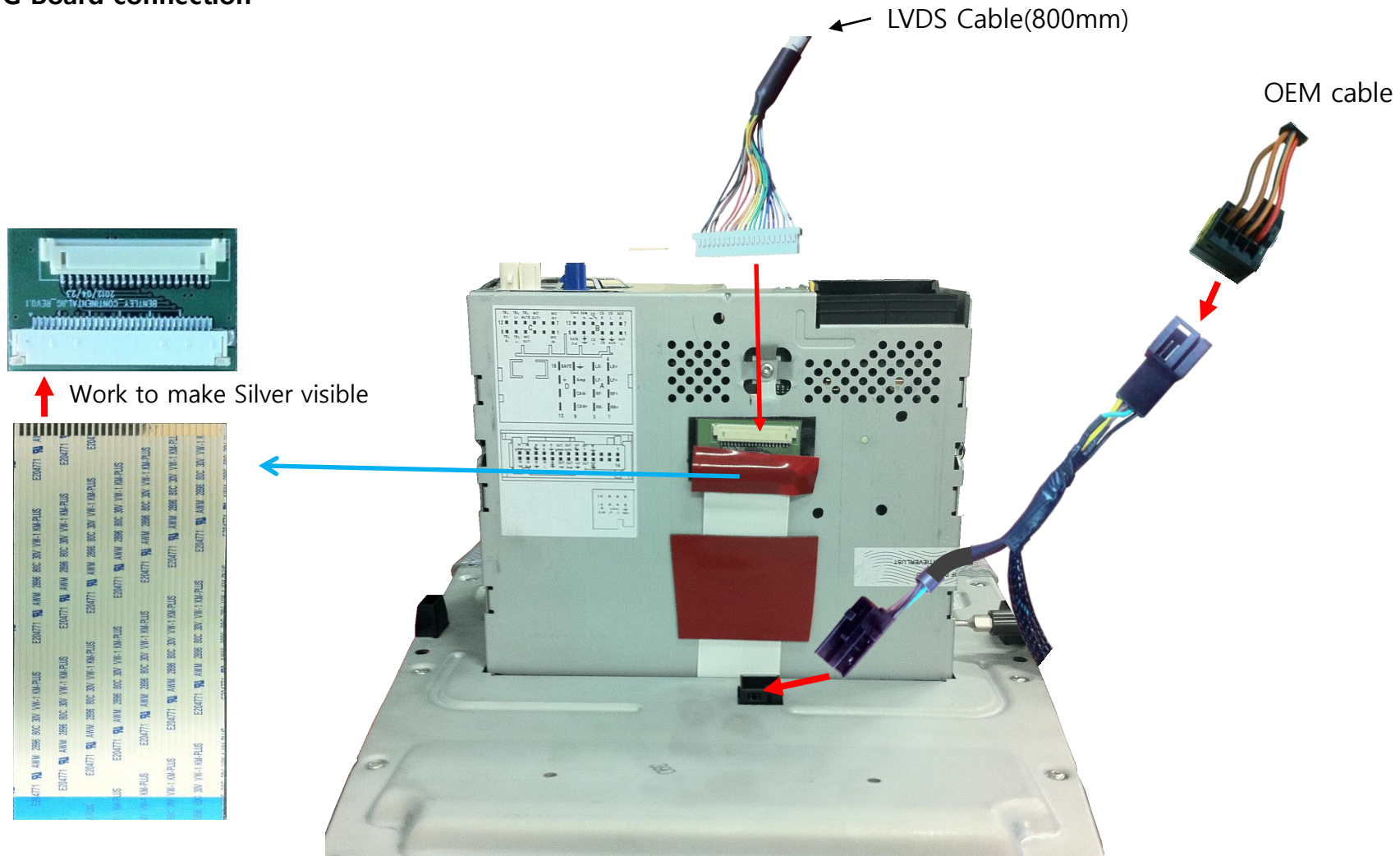
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## 9. OEM cable connection



# Install Manual

## 10. JIG Board connection



# Q & A

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1. If Interface has a problem, Please check LED.



- ACC on (12v), If Interface does not have a problem; GREEN LED is blinking every 1 sec..
- RED LED is turn on (not blinking), Interface has a problem.
- RED LED is turn off every 1 sec, there is no input.
- RED LED and GREEN LED both are not turn on, check the CAN or ACC connection.

2. Q : LCD screen black

A : LVDS Cable problem or, connection problem.

3. When DTV or DVD mode, cannot control with I-Drive

- Check IR cable, and DTV or DVD device' s ground cable and Interface ground cable join together with using extra cable.
- Check device in OSD menu